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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,776

11/26/2003

Daniel J. VanEpps JR.

9314-59

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02/23/2007

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EXAMINER

HANNON, CHRISTIAN A

ART UNIT

PAPER NUMBER

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/723,776

Applicant(s)

VANEPPS ET AL.

Examiner

Christian A. Hannon

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-17,20-25,28-32 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-12,14-15,17,20,23-25,28,30-32,35,37,38 is/are rejected.
- 7) ☒ Claim(s) 5,6,13,16,21,22,29 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This action is response to applicant's response filed on 11/15/2006. Claims 1, 4-17, 20-25, 28-32 & 35-38 are now pending in the present application. **This action is made final.**

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, 8, 10, 14, 15, 17, 23-25, 31, 32 & 38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cuddy (US 6,246,761).

Regarding claims 1, 17, 25 & 32, Cuddy teaches a method of operating an electronic device & electronic device & computer readable storage medium comprising receiving a noise signal (Column 4, Lines 66 & 67), generating a sound metric for the noise signal by performing a Fourier transform on the noise signal to obtain a frequency domain representation of the noise signal, wherein the sound metric is a loudness profile (Column 5, Lines 40-46; Column 7, Lines 10-13) and generating an alert signal having a spectral composition based on the sound metric (Column 5, Lines 46-57). Furthermore the Examiner wishes to notes that these devices and or means are housed within the DSP item 24 of figure 4 of Cuddy.

Regarding claims 7 & 23, Cuddy teaches the method of claim 1 and device of claim 17 wherein the sound metric comprises a loudness profile and sharpness profile

(Column 5, Lines 40-45). The examiner is interpreting amplitude to be analogous to the claimed 'sharpness'.

Regarding claim 8, Cuddy teaches the method of claim 1 further comprising receiving an incoming communication and or scheduled event at the electronic device and wherein receiving the noise signal comprises receiving the noise signal responsive to receiving the incoming communication (Column 7, Lines 54-65).

Regarding claims 10 & 24, Cuddy teaches the method of claim 1 and device of claim 17 wherein the electronic device is a mobile terminal. (Column 2, Lines 36-40).

Regarding claim 14, Cuddy teaches a method of operating an electronic device comprising providing a plurality of alert profiles at least one of the plurality of alert profiles having a different spectral composition than other ones of the plurality of alert profiles (Column 5, Lines 50-54), receiving a noise signal (Column 2, Lines 38-47), selecting one of the plurality of alert profiles responsive to receiving the noise signal (Column 5, Lines 40-49) and generating an alert signal that is based on the selected one of the plurality of profiles (Column 6, Lines 1-4).

Regarding claim 15, Cuddy teaches the method of claim 14 wherein generating the alert signal comprises generating the alert signal having a spectral composition that is based on the selected one of the plurality of alert profiles (Column 5, Lines 40-57).

Regarding claims 31 & 38, Cuddy teaches an electronic device comprising a means for providing a plurality of previously generated alert profiles, at least one of the plurality of alert profiles having a different spectral composition than other ones of the plurality of alert profiles (Column 5, Lines 49-57), means for receiving a noise signal

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(Column 2, Lines 38-40), means for selecting one of the plurality of alert profiles responsive to receiving the noise signal and means for generating an alert signal that is based on the selected one of the plurality of alert profiles (Column 5, Lines 40-57; Column 6, Lines 1-4). It is further noted by the Examiner that these values are determined empirically from field tests and therefor read as 'previously generated' profiles. Furthermore it is noted by the Examiner that the computer readable storage medium format of claim 38 reads analogous to the device of claim 31 and is similarly rejected.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 20, 28 & 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuddy in view of Boillot et al (US 2005/0278165), hereinafter Boillot.

Regarding claims 4, 20, 28 & 35, Cuddy teaches the method of claim 1 and devices of claims 17 & 25 and the computer readable medium of claim 32, however Cuddy fails to teach calculating a distribution of sones/bark versus bark for the frequency domain representation of the noise signal using an ISO 532B loudness calculation method and determining an overall loudness for the noise signal and a loudness in at least one critical band for the noise signal based on the distribution of

sones/bark versus bark, the loudness profile comprising the overall loudness of the noise signal and the loudness in at least one critical band. Boillot teaches calculating a distribution of sones/bark versus bark for the frequency domain representation of the noise signal using an ISO 532B loudness calculation method (Page 4, [0050]; Boillot) and determining an overall loudness for the noise signal and a loudness in at least one critical band for the noise signal based on the distribution of sones/bark versus bark, the loudness profile comprising the overall loudness of the noise signal and the loudness in at least one critical band (Page 2, [0032], Page 3, [0038-0039], Page 4, [0050]; Figure 4; Boillot). Therefore it would have been obvious to one of ordinary skill in the art to incorporate an ISO 532B loudness calculation method and device to determine an overall loudness for a noise signal as taught by Boillot in order to accurately calculate the spread of signal excitation to better analyze the loudness and frequency characteristics of a noise signal. Furthermore the Examiner wishes to note that these devices and or means are housed within the DSP item 24 of figure 4 of Cuddy.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cuddy.

Regarding claim 9 Cuddy teaches the method of claim 1, Cuddy also teaches that in a reflective embodiment that it would be useful to receive an incoming call after receiving the noise signal and generating the sound metric for the noise signal wherein generating the alert signal has a spectral composition based on the sound measure responsive to receiving the incoming call (Column 8, Lines 44-54). Therefore it would have been obvious to modify Cuddy to constantly update ring parameters, in response to the environment the device found itself in, before a call was received.

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6. Claims 11, 12, 30 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cuddy in view of Corkum (6,134,455).

Regarding claims 11, 30 & 37, Cuddy teaches providing a plurality of alert profiles each of the alert profiles being generated to have a spectral composition based on a noise signal sound metric associated with an ambient noise environment (Column 5, Lines 40-49; Cuddy), selecting one of the plurality of alert profiles (Column 5, Lines 49-59; Cuddy), generating an alert signal that is based on the selected one of the plurality of alert profiles (Column 6, Lines 1-4; Cuddy). However Cuddy does not teach receiving a user selection for a particular alert profile. Corkum teaches receiving a user selection for a particular alert profile (Column 6, Lines 48-55; Corkum). Therefore it would have been obvious to add a user input into Cuddy such as that taught by Corkum in order to allow a user to tell the device whether it was in a muffling vs. a reflective environment. Furthermore it is noted by the Examiner that the computer readable storage medium format of claim 37 reads analogous to the device of claim 30 and is similarly rejected.

Regarding claim 12, Cuddy and Corkum teach the method of claim 11, furthermore Cuddy teaches wherein generating the alert signal comprises generating the alert signal having a spectral composition that is based on the selected one of the plurality of alert profiles (Column 5, Lines 50-57; Cuddy).

***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 4-17, 20-25, 28-32 & 35-38 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment (6/12/2006) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian A. Hannon whose telephone number is (571) 272-7385. The examiner can normally be reached on Mon. - Fri. 8:00 AM - 4:30 PM.



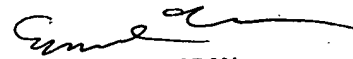
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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2/7/2007



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